

115. (new) The vascular prosthetic of claim 108 wherein the fixed tissue conduits are fixed by an aldehyde.

116. (new) The vascular prosthetic of claim 108 wherein the fixed tissue conduits are fixed by gamma radiation.

117. (new) The vascular prosthetic of claim 108 wherein the fixed tissue conduits are fixed by a polyepoxy compound.

REMARKS

Claims 30-50 are presently pending in the application. Claims 37-38 and 42-50 have been cancelled herein and claims 30, 32, 34, 39 and 40 have been amended and new claims 51-117 have been added. Claims 30-36, 39-41 and 51-117 are presented for consideration and allowance in the present application.

Claims 30-50 have been subject to an election/restriction requirement. A telephonic restriction on 2/5/02 to prosecute claims 30-41 is affirmed without traverse. Non-elected claims 42-50 have been canceled herein without prejudice. A species election to claims directed to Figure 4, claims 30-38 was also made. Since claims directed to the non-elected species of Figure 5 (claims 39-41) are dependent from generic claim 30, reconsideration and allowance of claims 39-41 is requested upon allowance of generic claim 30.

Claims 30-33 and 38 have been rejected under 35 USC 102(b) as being anticipated by Herwick et al. (519976). In response, the applicants respectfully traverse the rejection. Herwick's teachings do not extend to the joining of biological grafts made from tissue but rather to the manufacture of prosthetic grafts from synthetic materials. Moreover, there is no mention in Herwick et al that the grafts disclosed therein should include valves. It is mere speculation by the Examiner that a person skilled in the art would have selected veins including valves in order to make the graft according to Herwick et al. Since



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Herwick et al discloses grafts without valves that fact alone would instead suggest to the person skilled in the art that vein segments without valves should be selected in order to practice the teachings of Herwick et al. Independent claim 30 has been amended to recite fixed tissue, which Herwick et al also fails to teach, and the provision of a seam where the two valvular conduits are joined to form a single inflow, which Herwick et al also fails to teach. Herwick only teaches a seam joining the legs of the graft together so that the user can easily separate them, not that there is a seam that creates the inflow of the vascular prosthetic as set forth in the amended claim 30. Claims 31-33 and 38 dependent from claim 30. Reconsideration and allowance of claims 31-33 and 38 is therefore respectfully requested.

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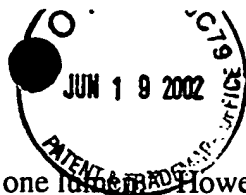
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Claims 30-34, 37 and 38 have been rejected under 35 USC 103(a) as being unpatentable over Quijano et al (5500014) in view of Herwick et al (5197976). In response, the applicants respectfully traverse the rejection. Quijano et al and Herwick et al cannot be combined in the manner indicated by the Examiner to make the applicants' invention. As set forth above, Herwick et al does not indicate anything about the suitability of fixed tissue to make a graft according to its teachings. To the contrary, the entire teaching of Herwick et al is to make such grafts out of a synthetic material and so a person skilled in the art would not select fixed tissue vessels to carry the invention of Herwick et al into practice. Herwick's only mention of tissues used for vascular grafts is in the background of the invention at column 1, lines 47-54 which recites:

Other materials which have been used for vascular grafts include autologous saphenous vein, woven or knitted Dacron brand polyester, or other synthetic polyester fiber, microporous Teflon, modified bovine carotid xenograft, and modified human umbilical vein. None of these has overcome the problems with early puncture of the graft following implantation.

This is not a teaching that these materials are suitable for use with the Herwick et al invention but rather a statement of the general deficiency of these materials. The examiner points to Herwick et al column 2, lines 40-42 for the teaching that "two ends



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can be joined to form one lumen. However, Herwick et al indicates only that the lumens can provide separate or joined flow paths as follows:

The lumina can form separate and distinct flowthrough paths along the entire longitudinal extent of the prosthesis, or can join at one end to form a single lumen.

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This is not a teaching that two separate grafts should be joined and seamed together to form a single lumen at one end but rather that the graft can be woven or formed to have flow paths that join at one end. This is not the applicants' invention as set forth in claims 30-34 and 28. For these reasons, it is believed that claims 30-34 and 38, as amended, should be allowed.

Claims 30-38 have been rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-3, 5, 9-13, 24, and 25 of U.S. Patent No. 6110201. In response, the applicants have provided a terminal disclaimer herewith which is believed to obviate the grounds for rejection.

Since this application has been finally rejected, a Request for Continued Examination accompanies this response. Also, a new power of attorney and mailing address accompanies this response.

Consideration and allowance of Claims 30-36, 39-41 and 51-117 is respectfully requested.

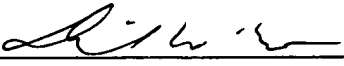


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APPENDIX A

30. (Amended) A vascular prosthetic comprising:

at least two fixed tissue [biological] valvular conduits, each of said [biological] conduits having an inflow end and an outflow end and a [biological] valve of fixed tissue housed therein;

wherein each of said [biological valvular] conduits is joined at a seam adjacent said inflow ends and upstream of each of said [biological] valves to form a single inflow end with a cross-sectional area larger than the cross-sectional area of any of the inflow ends of said [biological] valvular conduits.

32. (amended) The vascular prosthetic of claim 30 wherein the [biological] valvular conduits comprise first and second outflow ends, wherein at least one outflow end is suitable for attachment to a pulmonary trunk.

34. (amended) The vascular prosthetic of claim 63 wherein the [biological] valve of each [biological] valvular conduit opens at pressures as low as about 1mm Hg and remains sealably closed so as to withstand backflow pressures greater than about 200 mm Hg.

39. (amended) The vascular prosthetic of claim 30 wherein each of the [biological] valvular conduits is further joined adjacent their outflow ends and downstream of each of the [biological] valves to form a single outflow end of the vascular prosthetic.

40. (amended) The vascular prosthetic of claim 39 wherein a second [axial] seam joins the at least two [biological] valvular conduits adjacent their outflow ends and downstream of each of the [biological] valves to form the single outflow end of the vascular prosthetic.